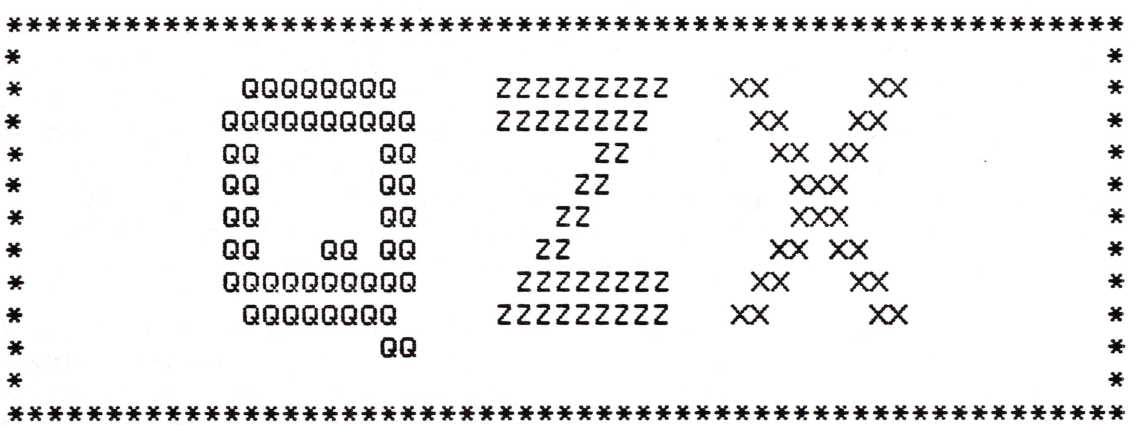

The Journal Covering Amateur Radio & Sinclair Computers
ZX80; Micro-Ace; ZX81; TS1000, 1500, & 2068; QL; Z88

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2025 O'Donnell Drive
Las Cruces, New Mexico
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EDITOR'S NOTES
K5XY

The last issue tried a little experiment. A picture was put in. The original was a very nice color photograph of the full sized keyboard that KF5GG had build. Of course, I did not expect it to come out in color, but I hoped that the black and white rendition would be clear enough to let the reader know something about the quality of the construction. Although it did lack quite a bit of the original detail, it served its purpose. I will try a few more pictures in the coming issues.

I have seen a notice which shows that Quantum Computing, which advertized for quite a while in QZX, has indeed filed for bankruptcy. It also appears that before quiting business the company did NOT cash all checks for goods not shipped. It is always sad to see somebody's dreams end. I know from personal experience that the people involved here were very enthusiastic supporters of the QL; so it is particularly sad in this case.

But, on a happier note, with this issue, QZX (or at least this incarnation of QZX) starts another year. I think that makes QZX the longest running Sinclair publication in the US. Lots has happened this year. For one thing we lost the aid of W4GHV, although he is still happily working with computers in North Carolina. Three people have been especially helpful during the past year. LU8MAD has provided a whole stream of really advanced technical articles for the ZX81 series of computers. Many of you have mentioned how much you have enjoyed these articles. Then Arnold Nieuwenhoff has been providing tapes full of Sinclair programs to those who have sent in extra money for the postage fund. Last, but not least, there is WA6DLI who has provided a large number of articles too. For an additional service from him, see the announcement entitled Free Satellite Program, which appears later in this issue.

On a sad note, I mention that I have just received a letter saying that the entire paid subscription list for Great Britain died in September. Kenneth Aston recently retired and returned to the islands. He had been a subscriber to QZX since at least 1983. His wife sent me notice and a list of the equipment he left behind, which included a TS1000, TS2068, and a Spectrum. She also sent back half the postage stamps from his last QZX, which the local post office had neglected to cancel.

On a lighter note, I have a special offer for a Canadian reader. For some time now I have had a Canadian dollar bill that some subscriber sent me instead of a SASE. The banks in town do realize that there are currencies other than US$. They will get me Mexican pesos in less than three days, if I want to go to Mexico. However they are a little more uncertain about other countries. I think they may regard Canada as a goose farm someplace up north. In any case they will charge me more than $1.00 to change this one. Therefore I will send it to the first Canadian reader who sends me a SASE ($0.30 US postage please, see below). The losers in this race will get their envelopes back with the next issue of QZX in them. They might also get a Canadian stamp or two taken from SASE's sent earlier. The local post office is even more particular than the banks.

QL LABEL PRINTER
WA6DLI

Here is a super program for the QL that will make an index label for disk or microdrive in tiny print with an Epson compatible printer. Even without a printer, it is useful to view the contents as it sorts them alphabetically. It is a public domain donation to QL users from my friend Real Gagnon, who publishes a French language QL newsletter in Canada.

It can also be studied to learn some printing techniques for use with QSL cards.

DLO_BAS prints a sorted directory on a label.

To run the software, type LRUN **xxxx**_DLO_BAS where **xxxx** is the device

You answer the questions and then you type LIST_PRT to print the labels on the printer.

The printer should be an EPSON compatible.

The labels are printed in ELITE , SUPERSCRIPT , COMPRESSED mode with a line spacing of 16/216".

DLO_BAS is a Public Domain Software for the Sinclair QL.

By Réal Gagnon
4870 Henri-Julien
Montréal Québec
CANADA H2T 2E1

```
100 REMark disk label organizer .5  par GAG-086 MTL
110 :
115     WINDOW 512,256,0,0
116     BORDER 3,45
117     PAPER 0:INK 7
120     CLS
125     PRINT "IMPORTANT: No WRITE PROTECT TABS in FLP1_ please..."\\
130     INPUT 'Directory of which device (ex. flp1_ mdv1_) ?  ';dev$
135     INPUT 'Write the TITLE/NOTE or just press [ENTER] ? ';titre$
140      read_dir              :REMark lecture du directory
150      display_files         :REMark montre les fichiers
160      sort fi$              :REMark classe en ordre alphabâtique
170      display_files         :REMark montre les fichiers en ordre
172 :
175      BEEP 1000,10
177      CSIZE#0,1,0
178      BORDER#0,1,7
180      PRINT#0,'TYPE   LIST_PRT  -> to print'
182      CSIZE#0,0,0
185      STOP
190 :
200 :
```

```
210 DEFine PROCedure read_dir
220       DELETE flp1_dir1
230       OPEN_NEW#5,flp1_dir1
240       DIR#5,dev$
250       CLOSE#5:OPEN#5,flp1_dir1
255 :
260 REMark trouve l'espace prise sur disque
265 :
270      CLS
280      INPUT#5,fr_sp$
290      PRINT fr_sp$
295 :
300 REMark compte les fichiers et trouve le plus long
305 :
310        INPUT#5,dummy$    :REMark espace vide
320        nfiles=0
330        lmax=0
340        REPeat loop
350           INPUT #5,a$
360           IF EOF(#5):EXIT loop
370           lfi=LEN(a$)
380           IF lfi>lmax:lmax=lfi
390           nfiles=nfiles+1
400        END REPeat loop
410        PRINT 'There is ';nfiles;' files on this disk!'
420        CLOSE#5:OPEN#5,flp1_dir1
430        INPUT#5,dummy$:INPUT#5,dummy$    :REMark espace disponible + vide
435 :
437 REMark creation du tableau contenant les fichiers...
438 :
440        DIM fi$(nfiles,lmax)
445 :
450 REMark lecture des fichiers
455 :
460     i=1
470   REPeat loop
480     INPUT#5,a$
490     IF EOF(#5):EXIT loop:END IF
500     IF a$<>'dir1'
510     fi$(i)=a$
520     i=i+1
530     END IF
540   END REPeat loop
550      CLOSE#5:DELETE flp1_dir1
560 END DEFine
570 :
575 :
580 DEFine PROCedure display_files
590      f=1
595      PRINT
600 FOR i=1 TO INT(nfiles/5)
610      FOR ii=0,15,30,45,60
620         PRINT TO ii,fi$(f);
630         f=f+1
640      END FOR ii
650    PRINT
660 END FOR i
```

```
670     l=0
680  FOR i=f TO nfiles
690     PRINT TO l,fi$(i);
700     l=l+15
710  END FOR i
720  END DEFine
730  :
735  :
737  REMark procâdures sort & qsort, source SINCLAIR QL WORLD!
738  :
740  DEFine PROCedure sort (array)
750    PRINT \\
760    INK 4
770    PRINT 'Sorting ...'\\
780    INK 7
790     qsort array,1,DIMN(array)
800  END DEFine sort
810  :
820  DEFine PROCedure qsort (array,bottom,top)
830     LOCal loop,lo,hi,pointer
840     lo=bottom:hi=top
850     pointer=bottom
860  REPeat loop
870     IF lo>=hi:EXIT loop
880     IF array(lo)>array(hi)
890        temp$=array(lo)
900        array(lo)=array(hi)
910        array(hi)=temp$
920          IF pointer=lo
930             lo=lo+1:pointer=hi
940          ELSE
950             hi=hi-1:pointer=lo
960          END IF
970     ELSE
980        IF pointer=lo
990             hi=hi-1
1000         ELSE
1010              lo=lo+1
1020         END IF
1030    END IF
1040 END REPeat loop
1050    IF ABS(top-bottom)<2 THEN RETurn
1060     qsort array, bottom, pointer-1
1070     qsort array, pointer+1, top
1080 END DEFine qsort
1090 :
1095 :
1100 DEFine PROCedure list_prt
1110     l$='                    '
1120     OPEN#5,ser1
1125 :
1127 REMark imprimante ->ELITE,COMPRESSE,SUPERSCRIPT,interligne 16/216"
1128 :
1130     PRINT#5,CHR$(27);"M";CHR$(15);CHR$(27);"S0";CHR$(27);"3";CHR$(16);
1140     PRINT#5,CHR$(27);'W1';titre$\fr_sp$;CHR$(27);'W0' :REMark large on/off
1142 REMark NBR_COL = how many column on the labels
1145     nbr_col=6
```

```
1150     n_lignes=INT(nfiles/nbr_col)
1170     FOR ligne=0 TO n_lignes
1180         FOR colonne=1 TO nbr_col
1190          IF ((ligne*6)+colonne)>nfiles:EXIT ligne
1200             long_f=LEN(fi$((ligne*6)+colonne))
1210             IF long_f>12:f$=fi$(((ligne*6)+colonne),1 TO 11):ELSE : f$=fi$(
ligne*6)+colonne)
1220             l_f=13-LEN(f$)
1230          PRINT #5,f$;l$(1 TO l_f);
1240         END FOR colonne
1250         PRINT#5
1260     END FOR ligne
1270     PRINT#5,CHR$(27);"@"\\\\\\\\\\\\:CLOSE#5
1280 END DEFine
1290 :
1300 DEFine PROCedure update
1310 DELETE flp1_dlo_bas
1320 SAVE flp1_dlo_bas
1330 END DEFine
```

```
EXAMPLE
rlhQL11/88
Aerial_bas    BIORYTHMS_x   BUNKERED_BO   Bunkered      best          blitz_bas
buzz_bas      CONNECT_X     designs_bas   dlo_bas       dlo_txt       electr_bas
eliza_bas     flags_exe     f_using       grid_bas      hole1         hole2
hole3         hole4         hole5         hole6         hole7         hole8
hole9         instr         LEICA_bas     life_bas      life_code     MASTERMIND_x
MISSILE_x     monitest_bas  palette_bas   paqman_bas    pattern_bas   peek_bas
quad_bas      SandL         SandL_Boot    SandL_doc     SPASS_BIN     SPASS_DEMO
SPASS_SCR     Spass_Boot    sat88rlh      sats_doc      using_doc     yahtzee_bas
```

QZX BACK ISSUES

Quite a few back issues have been distributed since this table last appeared. There are quite a few new months which are out of print or which have only a few issues available.

QZX Back Issues as of 1988 December

Month	1982	1983	1984	1985	1986	1987	1988
Jan	#	0	0	12	M	0	32
Feb	#	0	0	0	6	0	M
Mr	#	0	0	10	0	M	M
Ap	#	0	0	8	11	29	35
May	#	0	0	16	0	M	19
Jun	#	0	0	M	1	M	7
Jul	#	0	0	11	M	M	11
Ag	#	0	0	9	"	M	2
Sept	#	0	6	M	M	M	3
Oct	#	0	0	M	6	M	6
Nov	#	0	M	M	8	M	6
Dec	0	0	0	10	0	M	

0 = OUT OF PRINT
M = Many available

Back issues cost
$1.00 if # = 1 to M
$10.00 if # = 0

CORRECTIONS

Two corrections to previous articles have been brought to the attention of QZX. WA6DLI says that in his antenna article in the June 1988 issue a line was left out. The missing line was numbered 210. It is called in line 220, so he thought that was just a way of looping since Sinclair Basic will go to the next line if an unlisted line is specified. It turns out that line 210 is vital, as it is a request for the input of a frequency. Here is the missing line.

```
210 AT 1, 10: PRINT"Enter the Frequency in MHz for antenna (e.g. 14.2) _____";:INPUT mhz$:IF mhz$=""THEN GO TO 210
```

The other mistakes were in the article by LU8MAD in the November 1988 issue. There are two errors in the schematic. The IC in the upper right corner is a 74LS123 (not a 74LS132). Also the pin of that IC between pins 11 and 4 is pin 16. In the short BASIC program which accompanied the article line 30, 80, 90, and 100 should be deleted.

FREE SATELLITE PROGRAM

In the September 1988 issue of QZX WA6DLI wrote an article with lots of satellite information in it, including information on a satellite tracker program. Bob has heard from Rainer Steinbrenner, the author of the program, that no "royalty" is necessary for the Sat-Bahn program. So those who are interested in a satellite tracker for the TS computers may send the proper media and a self addressed stamped envelop for a program from Bob! The enclosure and postage/envelope required should match the following:

ZX81/TS1000/TS1500	blank cassette
Spectrum/TS2068	blank cassette
QL	blank or formatted microdrive cartridge

The ZX81 and the TS1000 will need a 16k RAM pack to use the program.

Please do everything possible to make it easy for Bob to provide this service. Use a strong envelope with address already printed on it. Enclose enough postage. Put your name and address on the blank cassette. Format and label the microdrive cartridge. Have fun with the program when you get it.

(716) 834-1716 **T & C SERVICES** (716) 834-1716
20 LIBERTY TERRACE
BUFFALO, N.Y. 14215
Call or write for a free catalog of products for the Timex Computer

WA6OJJ RECIPE FOR PORTABLE PACKET
WA6DLI

Here is a description of how WA6OJJ, a commercial pilot, configured his TS1000 for portable packet use. Take the following ingredients:

1 Sinclair ZX81 or TS1000/1500
1 TNC of smallest size available
(Heath HK-21 or a PAKCOMM if cost is a consideration)
1 Radio Shack TI-99 keyboard
1 COMLINK I RS-232 adapter
1 Set of GEL batteries
(tapped ar 9 and 12 VDC)
1 Small 12 VDC TV set
(3 or 4 in screen)
1 Old briefcase
Assorted switches, led lights, jacks, plugs, and minicoax.

Wire keyboard from published info in QZX. Mount in lid of briefcase so keys can be used when closed. Cut a panel next to keyboard so TV set screen can "pop-up" for viewing.

Install batteries, TV set, TNC, Computer, inside case with cables, switches, lights, to indicate function. May even add zener or regulator chips, along with jacks and plugs to allow:

a. Charging and operation from 115 volts.
b. External monitor when at home.
c. Connection to handheld or other ham rig that will be used on packet frequencies.
d. Connection of 2040 or other printer.

Details will vary with junkbox, ability, and grey matter.

This outfit has left mail in the local BBS mailbox for QZX and for WA6DLI from time to time.

QZX FRIENDS

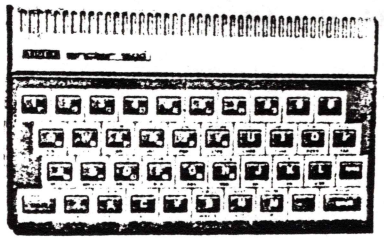
KA8RNY -- Bill is also interested in the satellite program mentioned in the article by WA6DLI.

KB4NED -- Mel uses a Prowriter 8510A as a printer with his Sinclair computer.

W9BS -- Jerry says that he hopes to get back on ATV after an absence of about ten months due to antenna problems.

VE7VL -- Val says that he has bought an IBM clone but still uses the TS1000 as his packet radio workhorse. He also said "LU8MAD's articles are fascinating - give him a big plug from me."

N4BRL -- William is a new subscriber and also asked for all the back issues still in print (41).



UNCLASSIFIED ADS

WANTED: UNCLASSIFIED ADS for publication in QZX. Cost is 1 cent for each keystroke (characters, blanks, etc.). Payment must be included with order. This is an excellent way to sell your program or unwanted equipment, ask for help, or find a specific program. Send your ad with payment to QZX, 2025 O'Donnell, Las Cruces, NM 88001.

FOR SALE: Index to QZX consisting of a book of xerox copies of all the covers since December 1982. Send $5.00 plus $1.00 shipping and handling ($2.00 if to a non-US address) to QZX, 2025 O'Donnell, Las Cruces, NM 88001.

FOR SALE: Book Easy-up Antennas for Radio Listeners and Hams by Edward Noll. Paperback (1988) 162 pages. Originally $16.95, now $11.00 postpaid in the US. A Sams publication. The title says it all. Alex. F. Burr, K5XY, 2025 O'Donnell, Las Cruces, NM 88001.

QZX Discount: 15% discount on all orders mentioning QZX. T & C Services (address in ad this issue.)

FOR SALE: Book ZX81 BASIC Book by Robin Norman. Paperback 190 pages. Originally $12.95 now $6.00 postpaid in US. Simple and clear introduction to ZX81 BASIC. Alex. F. Burr, K5XY, 2025 O'Donnell, Las Cruces, NM 88001.

WANTED: OS-64 Cartridge Ver 1.72-J Oliger T/S 1K 64K Ram memory board. Hal Schweikart WB3JDP, 753 Yeadon Ave., Yeadon, PA 19050.

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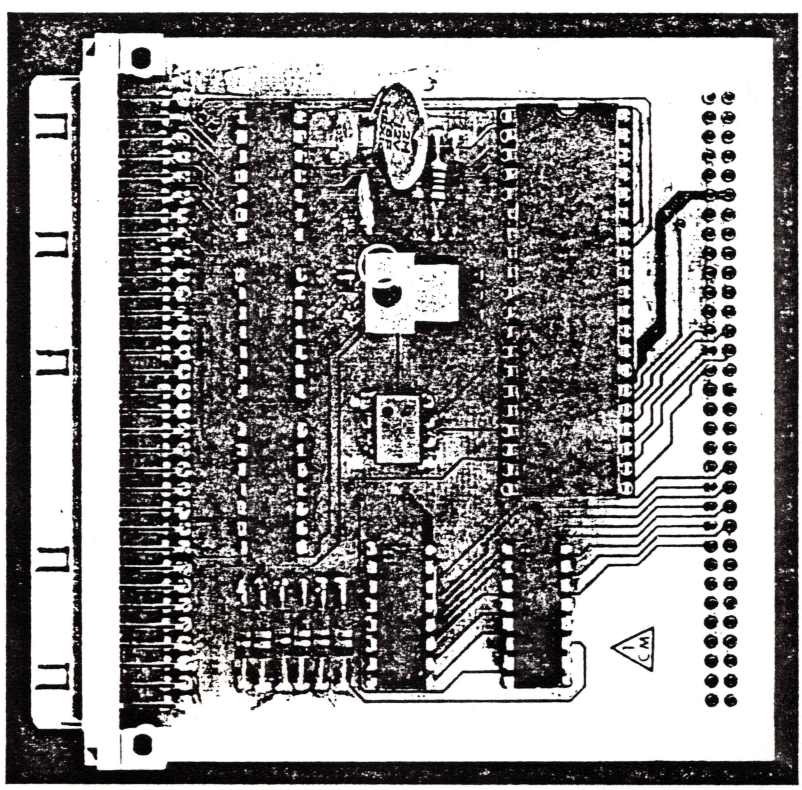

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73, K5XY

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```
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